



PL/PDF OffX v5

PL/PDF Manual Installation Guide

v5.31

Oracle Database installation and configuration



PL/PDF OffX v5

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1. System requirements

Database: Oracle Database 12c or later. Oracle Database 11g Express Edition is also supported.

Database character set: A single-byte database character set or AL32UTF8. AL32UTF8 is recommended.

2. Download and extract PL/PDF

Download the installation package from <https://www.plpdf.com/downloads>. Extract the downloaded plpdf*.zip archive to a working directory, referred to throughout this guide as <unzip_directory>.

Example: C:\downloads

Oracle Database 21c: If PLS-01918 is reported while compiling wrapped code, use the SQL*Plus installation procedure described in section 5.

3. Create the PLPDF owner user

Start SQL*Plus and connect to the target database with an administrative account, such as SYS. The supplied 1_create_user.sql script contains a minimal example; adapt the username, password, tablespace, quotas, and password policy to your environment.

```
CREATE USER plpdf_owner IDENTIFIED BY plpdf_owner;  
GRANT CONNECT TO plpdf_owner;  
GRANT RESOURCE TO plpdf_owner;  
GRANT select on sys.V_$DATABASE to plpdf_owner;  
GRANT execute on sys.DBMS_CRYPTO to plpdf_owner;
```

Multitenant databases: In Oracle Database 12c and later, a common user name must begin with C## (or c##), while a local user name must not begin with that prefix. Create the user in the appropriate container for your deployment.

Oracle CREATE USER reference:

https://docs.oracle.com/database/121/SQLRF/statements_8003.htm#SQLRF01503

Licence-specific grant: GRANT select on sys.V_\$DATABASE to plpdf_owner; is not required for the PL/PDF Enterprise Licence or Developer Licence.

Optional encryption grant: GRANT execute on sys.DBMS_CRYPTO to plpdf_owner; is optional. PDF encryption and protection are unavailable without it.

4. Connect as PLPDF_OWNER

Connect to the target database as PLPDF_OWNER. Replace <database> with the applicable Oracle Net service name, then disable SQL*Plus substitution-variable scanning before running the installation scripts.

```
CONNECT plpdf_owner/plpdf_owner@<database>  
SET SCAN OFF;
```



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5. Create PL/PDF objects

Important: Run this step from SQL*Plus. SQL Developer and PL/SQL Developer do not compile the wrapped packages used by this installation.

Run 2_install_objects.sql, or execute the component scripts in the following order. Install every required package specification before the corresponding package body.

```
@<unzip_directory>\plpdf\plpdf_ttf_tables.sql
@<unzip_directory>\plpdf\plpdf_parser_tables.sql
@<unzip_directory>\plpdf\<package>_h.sql
@<unzip_directory>\plpdf\<package>_b.sql
```

Package file reference

The installation archive contains the following PL/PDF and PL/PDF OffX packages. The <package> placeholder in the commands above corresponds to the package names listed below.

Package	Description
plpdf	Main
plpdf_acroform	PDF form (Acroform)
plpdf_annot	Annotations
plpdf_barcode	Barcode
plpdf_cell	Cell Print functions
plpdf_cert	Certification
plpdf_chart	Chart
plpdf_chart_3d	3D Chart
plpdf3_chart	Chart v3
plpdf_comp	Compressor
plpdf_const	Constants definition
plpdf_digsig	Digital Signature
plpdf_enc	Encoding
plpdf_err	Error handler
plpdf_gl	Glyphs
plpdf_img	Image handler
plpdf_img_err	Image handler error
plpdf_metric	Metrics
plpdf_parser	PDF parser
plpdf_pattern	Pattern
plpdf_pdfx	PDF/X support
plpdf_row	Row Print functions



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Package	Description
plpdf_text	Text handler
plpdf_toc	Table of Content
plpdf_ttf	True Type font handler
plpdf_ttf_parser	True Type font parser
plpdf_ttf_subset	True Type font subset creator
plpdf_type	Type definitions
plpdf_util	Utilities
plpdf_row_print	PL/PDF v2 compatible Row Print
plpdf_rtol	Right-to-Left Printing
plpdf3	Paragraph Print
plpdf3_xhtml	XHTML
plpdf_w3_util	XHTML Utilities
plpdf_tk5_comp	v5 compress
plpdf_tk5_lob	v5 LOB handling
plpdf_tk5_util	v5 Utilities
plpdf_tk5_v2	v5 Varchar2 handling
plpdf_tk5_val	v5 Value handling
plpdf_tk5	v5 Toolkit
plpdf_tagged	Tagged
plpdf_security	Security
plpdf_encrypt	Encrypt
plpdf_tsp	Timestamp
ploffx_app	App
ploffx_binxls_parser	Binary XLS Parser
ploffx_chart_api	Chart
ploffx_chart	Chart Utility
ploffx_comments	Comments
ploffx_comp	Compare Utility
ploffx_content_types	Content types
ploffx_core	Core
ploffx_document	Word document
ploffx_document_cr	Word document
ploffx_document_gen	Word document



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Package	Description
ploffx_document_tag	Word document
ploffx_document_type	Word document
ploffx_docx	DOCX
ploffx_docx_styles	Word document styles
ploffx_docx_type	Word document types
ploffx_drawing	Drawing
ploffx_fonttable	Font table
ploffx_headerfooter	Header and footer
ploffx_numbering	Numbering
ploffx_picture	Picture
ploffx_prels	Relationships
ploffx_settings	Settings
ploffx_sharedstrings	Shared strings
ploffx_sheet	Sheet
ploffx_styleswitheffects	Styles with effects
ploffx_theme	Theme
ploffx_util	Utilities
ploffx_vmldrawing	VML Drawing
ploffx_websettings	Websettings
ploffx_workbook	Workbook
ploffx_xls_parser	XLS parser
ploffx_xlsx	XLSX
ploffx_xlsx_parser	XLSX parser
ploffx_xlsx_styles	XLSX styles
plx_sc	Simple Composer
plpdf_reporter_docx	Reporter main package
plpdf_reporter_pdf	Reporter main package
plpdf_reporter_types	Reporter types
plpdf_reporter_util	Reporter utilities package
plpdf_mailmerge	MailMerge package



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Optional Java-based compressor

To use the optional Java-based compressor, install LobCompressor_java.sql and use plpdf_comp_java.sql in place of the standard plpdf_comp implementation.

```
LobCompressor_java.sql  
plpdf_comp => plpdf_comp_java.sql
```

6. Compile invalid packages (optional)

After installation, compile an individual invalid package or compile all invalid objects in the PLPDF_OWNER schema. The supplied 3_compile_schema.sql script performs the schema-level compilation.

Compile one package

```
alter package plpdf_util compile package;
```

Compile the schema

```
exec dbms_utility.compile_schema(schema => 'PLPDF_OWNER');
```

7. Request and install the certification key

PL/PDF is a commercial product and requires a licence for each Oracle database. A Single Server Licence uses V_\$DATABASE.DBID when generating and validating the certification key. An Enterprise Licence does not use the DBID.

After installing PL/PDF, run GetCertKey once to generate the preliminary certification key. Send the returned string to info@plpdf.com. PL/PDF support will return the certification key for the purchased licence.

Trial mode: Use TRIAL as the certification key to evaluate the product. Trial output is limited to five pages and contains a watermark.

Run the following commands from SQL*Plus:

```
SET LINE 1000  
select plpdf.getcertkey from dual;
```

In the plpdf_cert package body, locate the SetCertKey function and replace its return value.

Original: RETURN 'TRIAL';

New: RETURN '<certification key>';

Example: RETURN '1234567890ABCDEF';

Compile the plpdf_cert package after saving the change.



8. Configure the default encoding (optional)

Set the default encoding in the plpdf_cert package by changing the return value of GetDefaultEncoding. When most reports use the same encoding, a configured default avoids a SetEncoding call in every report procedure and provides faster execution. Use SetEncoding only when a report requires a different encoding.

Supported values

Encoding	Notes
cp1250	
cp1251	
cp1252	Default
cp1253	
cp1254	
cp1255	
cp1256	
cp1257	
cp1258	
cp874	
iso-8859-1	
iso-8859-2	
iso-8859-4	
iso-8859-5	
iso-8859-7	
iso-8859-9	
iso-8859-15	
iso-8859-16	
koi8_r	
koi8_u	
utf16	AL32UTF8 database with embedded Unicode TrueType fonts

In the plpdf_cert package body, locate GetDefaultEncoding and replace its return value.

Original: RETURN 'cp1252';

New: RETURN '<encoding>';

Example: RETURN 'iso-8859-2';

Compile the plpdf_cert package after saving the change.



9. Configure grants and synonyms (optional)

If the application that generates PDF documents runs in another Oracle schema, grant that schema access to the required PL/PDF packages and tables.

Schema-specific grants

```
grant execute on <package> to plpdf_user;  
grant select on <table> to plpdf_user;
```

The 5_plpdf_grant_objects.sql script contains the complete list of schema-specific grants.

Public grants

```
grant execute on <package> to public;  
grant select on <table> to public;
```

The 5_plpdf_grant_objects_public.sql script contains the complete list of public grants.

Synonyms

A synonym provides an alternative name for an object owned by PLPDF_OWNER, allowing application code to reference the object without qualifying it with the owner schema.

```
create synonym <package> for plpdf_owner.<package>;  
create public synonym <package> for plpdf_owner.<package>;
```

Use 6_plpdf_user_create_synonyms.sql for schema-specific synonyms or 6_plpdf_user_create_synonyms_public.sql for public synonyms. Each script contains the complete required list.

Security: Public grants and public synonyms expose PL/PDF objects to every user in the current database. Prefer schema-specific access unless public access is explicitly required and approved.